In the Claims:

Please cancel claims 1-65 without prejudice or disclaimer.

Please add new claims 66-103 as follows:

Claims 1-65 (cancelled)

66. (New) A heat sink material comprising carbon or graphite and metal which is at least one selected from Cu, Al, and Ag,

wherein said heat sink material is constructed by infiltrating a porous sintered member with said metal, said porous sintered member being obtained by sintering said carbon or said graphite to form a network,

wherein an element for improving wettability at an interface is added to said metal,

wherein an average coefficient of thermal conductivity of those in directions of orthogonal three axes, or a coefficient of thermal conductivity in a direction of any axis is not less than 180 W/mK, and a ratio of coefficient of thermal conductivity is not more than 1:5 between a direction in which said coefficient of thermal conductivity is minimum and a direction in which said coefficient of thermal conductivity is maximum, and

wherein a coefficient of thermal expansion is 1×10^{-6} to 10×10^{-6}/°C.

67. (New) The heat sink material according to claim 66, wherein said element to be added for improving said interface wettability is one or more of those selected from Te, Bi, Pb, Sn, Se, Li, Sb, Tl, Ca, Cd, and Ni.

68. (New) The heat sink material according to claim 66, wherein an additive is added to said carbon or said graphite for decreasing a closed porosity when said carbon or said graphite is sintered.

69. (New) The heat sink material according to claim 68, wherein said additive for decreasing said closed porosity is at least one selected from SiC and Si.

70. (New) The heat sink material according to claim 66, wherein a closed porosity is not more than 12 % by volume.

71. (New) The heat sink material according to claim 66, wherein said carbon or said graphite has a coefficient of thermal conductivity of not less than 100 W/mK.

72. (New) The heat sink material according to claim 66, wherein as for volume ratios between said carbon or said graphite and said metal, said volume ratio of said carbon or said graphite is within a range from 20 to 80 % by volume, and said volume ratio of said metal is within a range from 80 to 20 % by volume.

73. (New) A heat sink material comprising carbon or graphite and metal which is at least one selected from Cu, Al, and Ag,

wherein said heat sink material is constructed by infiltrating a porous sintered member with said metal, said porous sintered member being obtained by sintering said carbon or said graphite to form a network,

wherein an element for improving reactivity with said carbon or said graphite is added to said metal,

wherein an average coefficient of thermal conductivity of those in directions of orthogonal three axes, or a coefficient of thermal conductivity in a direction of any axis is not less than 180 W/mK, and a ratio of coefficient of thermal conductivity is not more than 1:5

between a direction in which said coefficient of thermal conductivity is minimum and a direction in which said coefficient of thermal conductivity is maximum, and

wherein a coefficient of thermal expansion is 1×10^{-6} to 10×10^{-6}/°C.

74. (New) The heat sink material according to claim 73, wherein said element to be added to improve said reactivity with said carbon or said graphite is one or more of those selected from Nb, Cr, Zr, Be, Ti, Ta, V, B, and Mn.

75. (New) The heat sink material according to claim 73, wherein an additive is added to said carbon or said graphite for decreasing a closed porosity when said carbon or said graphite is sintered.

76. (New) The heat sink material according to claim 75, wherein said additive for decreasing said closed porosity is at least one selected from SiC and Si.

77. (New) The heat sink material according to claim 73, wherein a closed porosity is not more than 12 % by volume.

78. (New) The heat sink material according to claim 73, wherein said carbon or said graphite has a coefficient of thermal conductivity of not less than 100 W/mK.

79. (New) The heat sink material according to claim 73, wherein as for volume ratios between said carbon or said graphite and said metal, said volume ratio of said carbon or said graphite is within a range from 20 to 80 % by volume, and said volume ratio of said metal is within a range from 80 to 20 % by volume.

80. (New) A heat sink material comprising carbon or graphite and metal which is at least one selected from Cu, Al, and Ag,

wherein said heat sink material is constructed by infiltrating a porous sintered member with said metal, said porous sintered member being obtained by sintering said carbon or said graphite to form a network,

wherein an element, which has a temperature range of solid phase/liquid phase of not less than 30 °C, is added to said metal in order to improve molten metal flow performance,

wherein an average coefficient of thermal conductivity of those in directions of orthogonal three axes, or a coefficient of thermal conductivity in a direction of any axis is not less than 180 W/mK, and a ratio of coefficient of thermal conductivity is not more than 1:5 between a direction in which said coefficient of thermal conductivity is minimum and a direction in which said coefficient of thermal conductivity is maximum, and

wherein a coefficient of thermal expansion is 1×10^{-6} to 10×10^{-6}/°C.

81. (New) The heat sink material according to claim 80, wherein said element to be added is one or more of those selected from Sn, P, Si, and Mg.

82. (New) The heat sink material according to claim 80, wherein an additive is added to said carbon or said graphite for decreasing a closed porosity when said carbon or said graphite is sintered.

83. (New) The heat sink material according to claim 82, wherein said additive for decreasing said closed porosity is at least one selected from SiC and Si.

84. (New) The heat sink material according to claim 80, wherein a closed porosity is not more than 12 % by volume.

85. (New) The heat sink material according to claim 80, wherein said carbon or said graphite has a coefficient of thermal conductivity of not less than 100 W/mK.

86. (New) The heat sink material according to claim 80, wherein as for volume ratios between said carbon or said graphite and said metal, said volume ratio of said carbon or said graphite is within a range from 20 to 80 % by volume, and said volume ratio of said metal is within a range from 80 to 20 % by volume.

87. (New) A heat sink material comprising carbon or graphite and metal which is at least one selected from Cu, Al, and Ag,

wherein said heat sink material is constructed by infiltrating a porous sintered member with said metal, said porous sintered member being obtained by sintering said carbon or said graphite to form a network,

wherein an element for lowering a melting point is added to said metal,

wherein an average coefficient of thermal conductivity of those in directions of orthogonal three axes, or a coefficient of thermal conductivity in a direction of any axis is not less than 180 W/mK, and a ratio of coefficient of thermal conductivity is not more than 1:5 between a direction in which said coefficient of thermal conductivity is minimum and a direction in which said coefficient of thermal conductivity is maximum, and

wherein a coefficient of thermal expansion is 1×10^{-6} to 10×10^{-6}/°C.

88. (New) The heat sink material according to claim 87, wherein said element to be added is Zn.

89. (New) The heat sink material according to claim 87, wherein an additive is added to said carbon or said graphite for decreasing a closed porosity when said carbon or said graphite is sintered.

90. (New) The heat sink material according to claim 89, wherein said additive for decreasing said closed porosity is at least one selected from SiC and Si.

91. (New) The heat sink material according to claim 87, wherein a closed porosity is not more than 12 % by volume.

92. (New) The heat sink material according to claim 87, wherein said carbon or said graphite has a coefficient of thermal conductivity of not less than 100 W/mK.

93. (New) The heat sink material according to claim 87, wherein as for volume ratios between said carbon or said graphite and said metal, said volume ratio of said carbon or said graphite is within a range from 20 to 80 % by volume, and said volume ratio of said metal is within a range from 80 to 20 % by volume.

94. (New) A heat sink material comprising carbon or graphite and metal which is at least one selected from Cu, Al, and Ag,

wherein said heat sink material is constructed by infiltrating a porous sintered member with said metal, said porous sintered member being obtained by sintering said carbon or said graphite to form a network,

wherein an element for improving said coefficient of thermal conductivity is added to said metal,

wherein an average coefficient of thermal conductivity of those in directions of orthogonal three axes, or a coefficient of thermal conductivity in a direction of any axis is not less than 180 W/mK, and a ratio of coefficient of thermal conductivity is not more than 1:5 between a direction in which said coefficient of thermal conductivity is minimum and a direction in which said coefficient of thermal conductivity is maximum, and wherein a coefficient of thermal expansion is 1×10^{-6} to 10×10^{-6}/°C.

95. (New) The heat sink material according to claim 94, wherein an element for improving said coefficient of thermal conductivity is added to said metal, said added element being alloyed with said metal to obtain an alloy which is deposited on the surface of said metal after heat treatment and reaction with carbon, and wherein said alloy has a coefficient of thermal conductivity of not less than 10 W/mK.

96. (New) The heat sink material according to claim 94, wherein an additive is added to said carbon or said graphite for decreasing a closed porosity when said carbon or said graphite is sintered.

97. (New) The heat sink material according to claim 96, wherein said additive for decreasing said closed porosity is at least one selected from SiC and Si.

98. (New) The heat sink material according to claim 94, wherein a closed porosity is not more than 12 % by volume.

99. (New) The heat sink material according to claim 94, wherein said carbon or said graphite has a coefficient of thermal conductivity of not less than 100 W/mK.

100. (New) The heat sink material according to claim 94, wherein as for volume ratios between said carbon or said graphite and said metal, said volume ratio of said carbon or said graphite is within a range from 20 to 80 % by volume, and said volume ratio of said metal is within a range from 80 to 20 % by volume.

101. (New) A heat sink material comprising carbon or graphite and metal which is at least one selected from Cu, Al, and Ag,

wherein a carbide layer is formed on a surface of said carbon or said graphite,

wherein an average coefficient of thermal conductivity of those in directions of orthogonal three axes, or a coefficient of thermal conductivity in a direction of any axis is not less than 180 W/mK, and a ratio of coefficient of thermal conductivity is not more than 1:5

between a direction in which said coefficient of thermal conductivity is minimum and a direction in which said coefficient of thermal conductivity is maximum, and

wherein a coefficient of thermal expansion is 1×10^{-6} to 10×10^{-6}/°C.

102. (New) The heat sink material according to claim 101, wherein an element for forming a carbide layer is added to said metal, and wherein said carbide layer is formed on the basis of a reaction at least between said carbon or said graphite and the element to be added.

103. (New) The heat sink material according to claim 102, wherein said element to be added is one or more of those selected from Ti, W, Mo, Nb, Cr, Zr, Be, Ta, V, B, and Mn.